

## **OW Management Report – Charleston, WV Chemical Spill – 1/16/2014**

(The main sources for this information are an OEM Spot Report issued at 1600 hr on 1/15/14, the WVAV Website, and the FEMA Daily Operations Report dated 1/16/14. New information since the latest OW Management Report is highlighted.)

### **Situation:**

On January 10, the President approved an Emergency Declaration for the State of West Virginia after a chemical leaked through a secondary containment area at a Freedom Industries chemical plant and into the Elk River in Charleston, WV (pop. 51,018) (NRC#1070627). The chemical (MCHM) (4-methylcyclohexanemethanol) is a flammable solvent used in the coal preparation process and is an irritant to eyes, respiratory system, and skin. FEMA reports that up to 7,500 gallons of chemical leaked in the Elk River near the Kanawha Valley Water Treatment Plant. Based on river flow dilution, officials calculate the chemical concentration in the water to be well below the CDC declared safe level. The Kanawha Valley Water Treatment Plant detected the chemical even after the increased carbon treatment effort was put in place. Freedom Industries is working to clean up the spill at the facility and in the river.

### **Drinking Water Impacts:**

The WVAVC has lifted the drinking water use restrictions in more zones this morning, advising customers that they can use water for all purposes after flushing their plumbing systems.

A “Do Not Use” order remains in effect for approximately 43,000 customers. As of 12:30 a.m. EST Jan 16, water bans lifted for 57,000 customers (57 percent of customers).

CDC advising threshold of 1 ppm is only for bathing or flushing. Odor can occur at levels less than 1 ppm; if odor is detected, water should not be ingested.

State requested additional water support until CDC gives guidance on further remediation of water distribution system.

Precautionary boil water advisory issued for Sissonville (Kanawha County); boiling will kill bacteria and other organisms; extensive flushing of system caused water storage tank to drain.

Multiple restaurants authorized to reopen in greater Charleston; more will reopen after successfully completing prescribed water system flushing and being certified by county board of health.

West Virginia American Water has also provided the following statement on its website: According to the CDC, “At this time, scientists continue to recommend 1 ppm as a protective level to prevent adverse health effects. However, due to limited availability of data, and out of an abundance of caution, you may wish to consider an alternative drinking water source for pregnant women until the chemical is at non-detectable levels in the water distribution system.”

### **Spill Containment and River Impacts:**

EPA lead has confidence spill is contained; sampling of water plant’s intake and output lines have showed no MCHM for more than past 24 hours; remediation currently focused on tank removal.

EPA has received some reports from the Ohio River Valley Water Sanitation Commission (ORSANCO) sampling in the Elk and Ohio Rivers. ORSANCO reports that the leading edge of the plume was detected

at 9:00 pm on January 14<sup>th</sup> at Meldahl Locks and Dam, at Ohio River mile 436.

A representative from the US Fish & Wildlife arrived today to collect information for a possible Natural Resource Damage Assessment. His primary concern is mussels.

**FEMA Activities:**

NRCC & NWC have transitioned back to Normal Operations

- Region III RRCC at Level III (Partial Activation); ESFs released, but remain on standby
- FCO, IMAT & LNO at IOF in Charleston, WV
- State requested additional 1.2 million liters of water; FEMA will ship 1.6 million liters; 400,000 liters to arrive by noon today, Jan 16
- HHS ESF-8 demobilized at 12:30 pm EST Jan 15